

REMARKS/ARGUMENTS

Claims 1-20 are in the application. The Examiner has rejected claims 1, 2, 6-8, and 13 under 35 U.S.C. § 102(e) as anticipated by Maekawa et al. 5,644,388. The Examiner has rejected claims 3-4, 9-12, and 14-20 under 35 U.S.C. § 103(a) as unpatentable over Maekawa et al in view of Martin et al 4,573,796. The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as unpatentable over Maekawa et al in view of Ross et al 5,877,863.

35 U.S.C. § 102(e) Rejections:

The Examiner has rejected claims 1, 2, 6-8, and 13 under 35 U.S.C. § 102(e) as anticipated by Maekawa et al. However all of the independent claims include the element of "an optical element for collecting nearly all of the light from the LED . . ." Maekawa et al includes an LED (though it is used as a trigger, and not for illumination as in the present invention). It also includes a conventional lens spaced apart from the LED in some embodiments. However, such a lens will not collect more than a small minority of light from the LED. Light generated by LEDs is highly divergent, and very little of it will even reach a conventional lens that is spaced apart from the LED. This is why the preferred embodiment of the present invention either uses a flat pack LED or removes the dome from a conventional LED, and places a ball lens directly adjacent to the LED. This is followed by a conventional lens. In this way, most of the light from the LED is collected. Since Maekawa et al

does not teach or suggest an optical element for collecting nearly all of the light from the LED, the 35 U.S.C. § 102(e) rejections are respectfully traversed.

35 U.S.C. § 103(a) Rejections:

The Examiner has rejected claims 3-4, 9-12, and 14-20 under 35 U.S.C. § 103(a) as unpatentable over Maekawa et al in view of Martin et al 4,573,796. The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as unpatentable over Maekawa et al in view of Ross et al 5,877,863.

It is important to note that the Maekawa et al invention is not using an LED as an illumination source, but rather as a trigger for the actual illumination source, eg a pulsed laser. It had not been considered at the time of the Maekawa et al invention that an LED could be used as an illumination source. Therefore, the claims of the present invention are not obvious over Maekawa et al and the other cited references for two reasons:

(1) The LED is the illumination source in the present invention

(2) Maekawa et al lacks "an optical element for collecting nearly all of the light from the LED . . ." as is claimed in the present application, so the LED could not have been used as the illumination source, even if it had been considered at the time.

All of the independent claims (1, 7, and 14) in the present invention are patentable for the reasons discussed in the two sections above. The

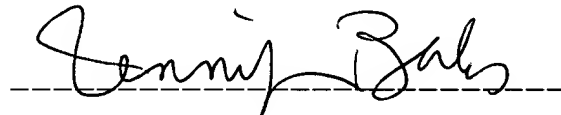
dependent claims are patentable as depending from patentable claims and also include separately patentable elements.

As all of the claims now in the application appear to be in condition for allowance, applicant respectfully requests that the application be allowed and passed to issue as soon as possible.

Respectfully submitted,

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A handwritten signature in cursive script, appearing to read "Jennifer Bales", is written over a horizontal dashed line.

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